



MARINE CORPS SYSTEMS COMMAND
UNITED STATES MARINE CORPS

30 Jul 09

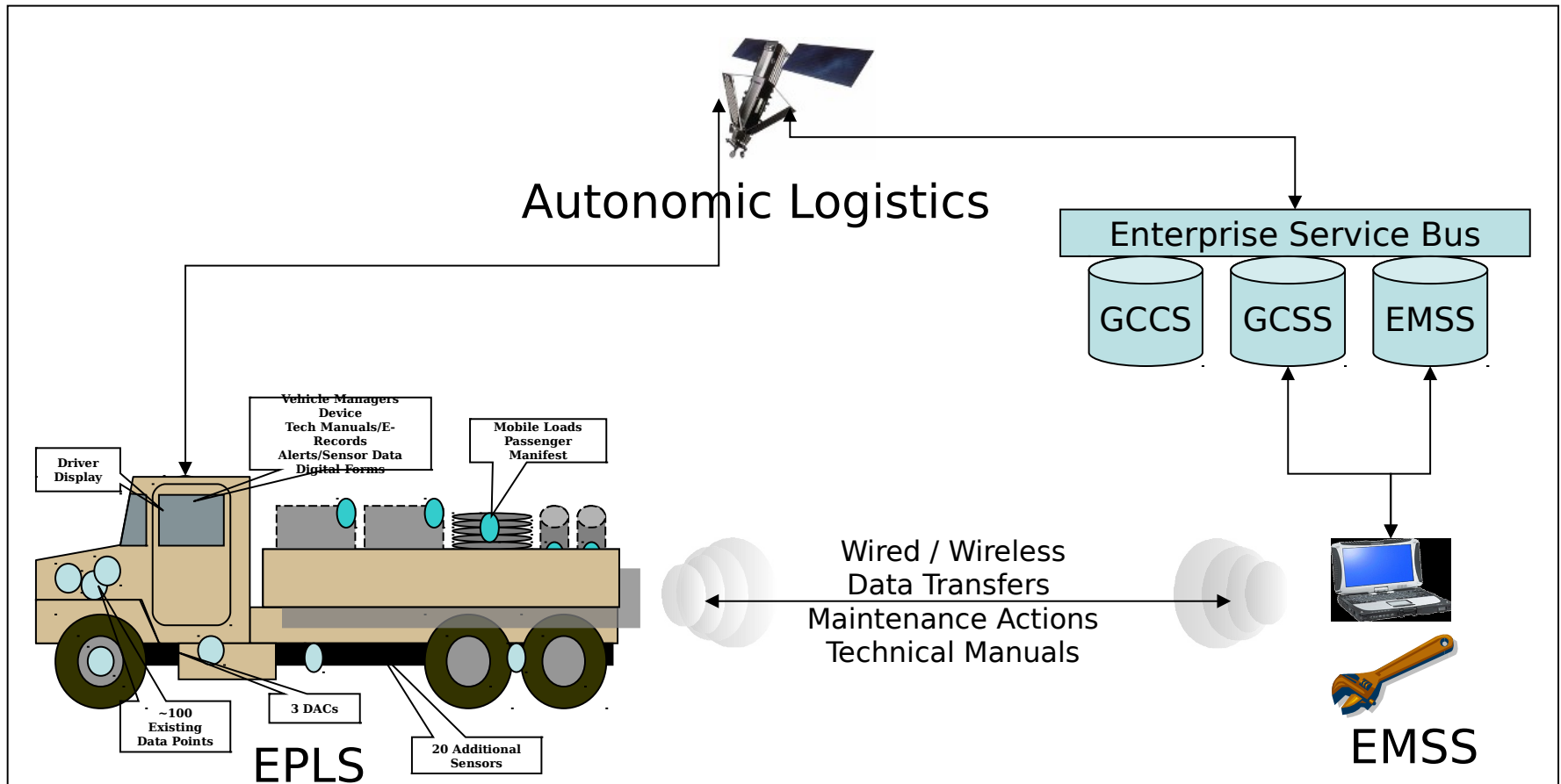
Autonomic Logistics Family of Systems Capabilities Overview



Program Manager, Autonomic Logistics
Marine Corps Systems Command
July 2009



Overarching Concept





AL Approach to CBM+

Acquire system/subsystem performance/health data, perform diagnostics and analysis at unit, battalion, enterprise (C2 and Logistics) levels

Acquire Data, Assess

Assess, Analyze, Diagnostics,

Assess, Analyze, Diagnostics, Prognostics Forecast, Share

Company/Deployable/Regional levels

System/sub system health, ammo, fuel and mobile load status



AAV with EPLS Sensors



LAV with EPLS Sensing

EPLS

Collect, monitor and report platform health to maintenance techs

Communication Messaging



EMSS

Provides IETMs and maintenance support

Database Replication



SOA Environment
Transfer Cross Domain Guard
CBM+ Application

GIG



EMSS Architecture

Top Tier

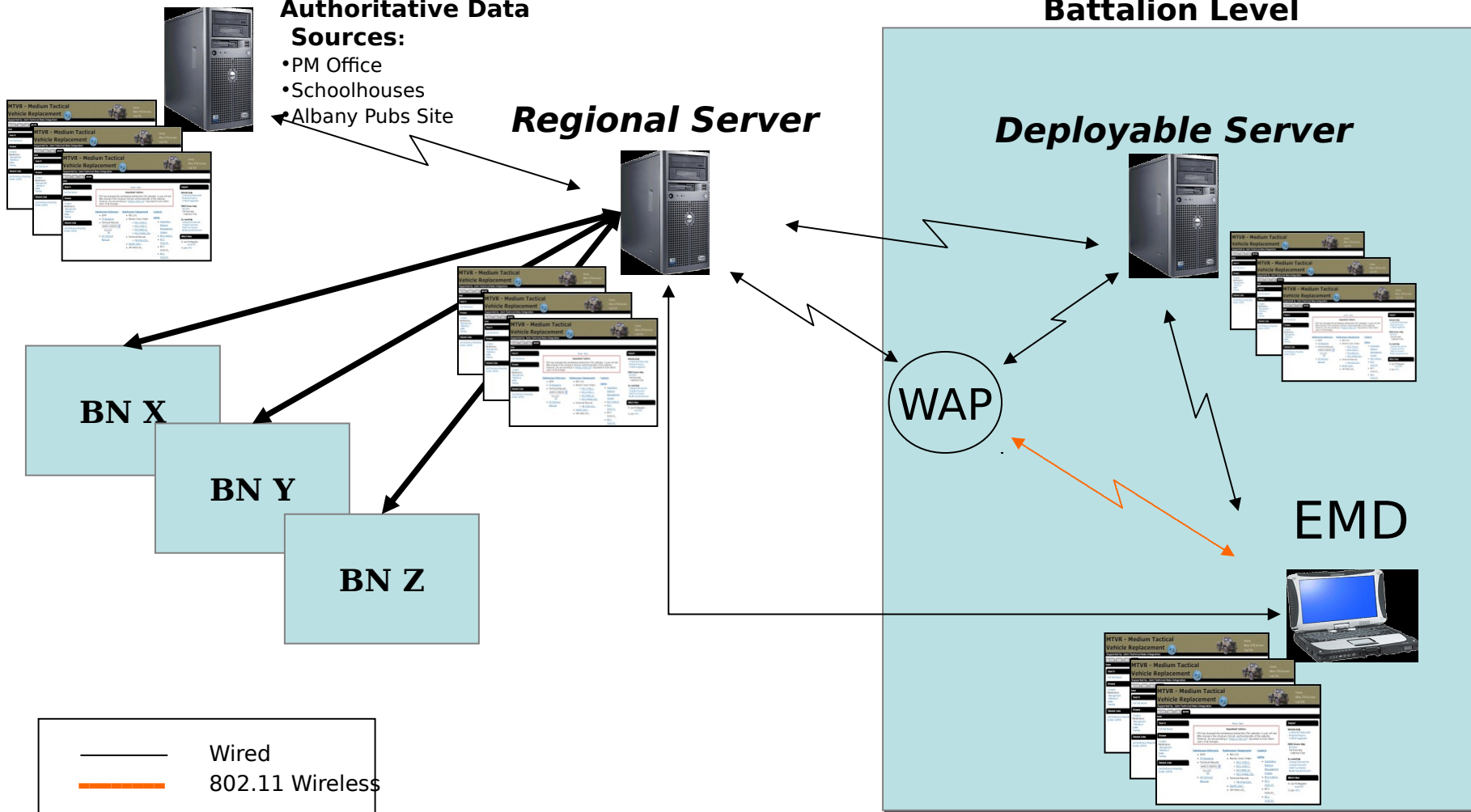
Authoritative Data Sources:

- PM Office
- Schoolhouses
- Albany Pubs Site

Regional Server

Battalion Level

Deployable Server





MARINE CORPS SYSTEMS COMMAND
UNITED STATES MARINE CORPS

30 Jul 09



Embedded Platform Logistics System (EPLS)



EPLS Goals

- Provides a basic infrastructure to enable condition based maintenance
- Install an “On-platform” sense capability
- Enable USMC autonomic logistics capability
- Provide stand alone capability that immediately supports the vehicle operator and maintainer
 - Digital, open systems design
 - Networking connectivity
- Platforms – LAV, MTRV, AAV, LVSR

AL supports achievement of Marine Corps Logistics Modernization goals and objectives



MARINE CORPS SYSTEMS COMMAND
UNITED STATES MARINE CORPS

30 Jul 09

EPLS Vehicle Kit



Data Acquisition/STE-ICE controllers



Power Supply



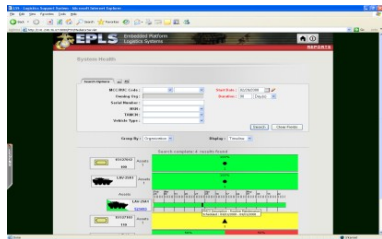
Automated Health Monitor



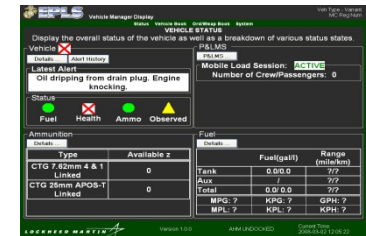
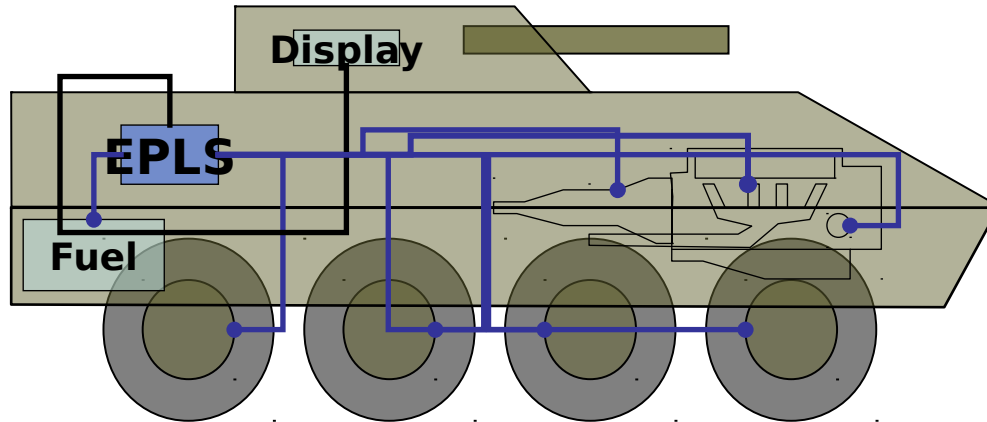
Display



Vehicle Manager Device



Off-Board Service Application - Fleet Status Viewer



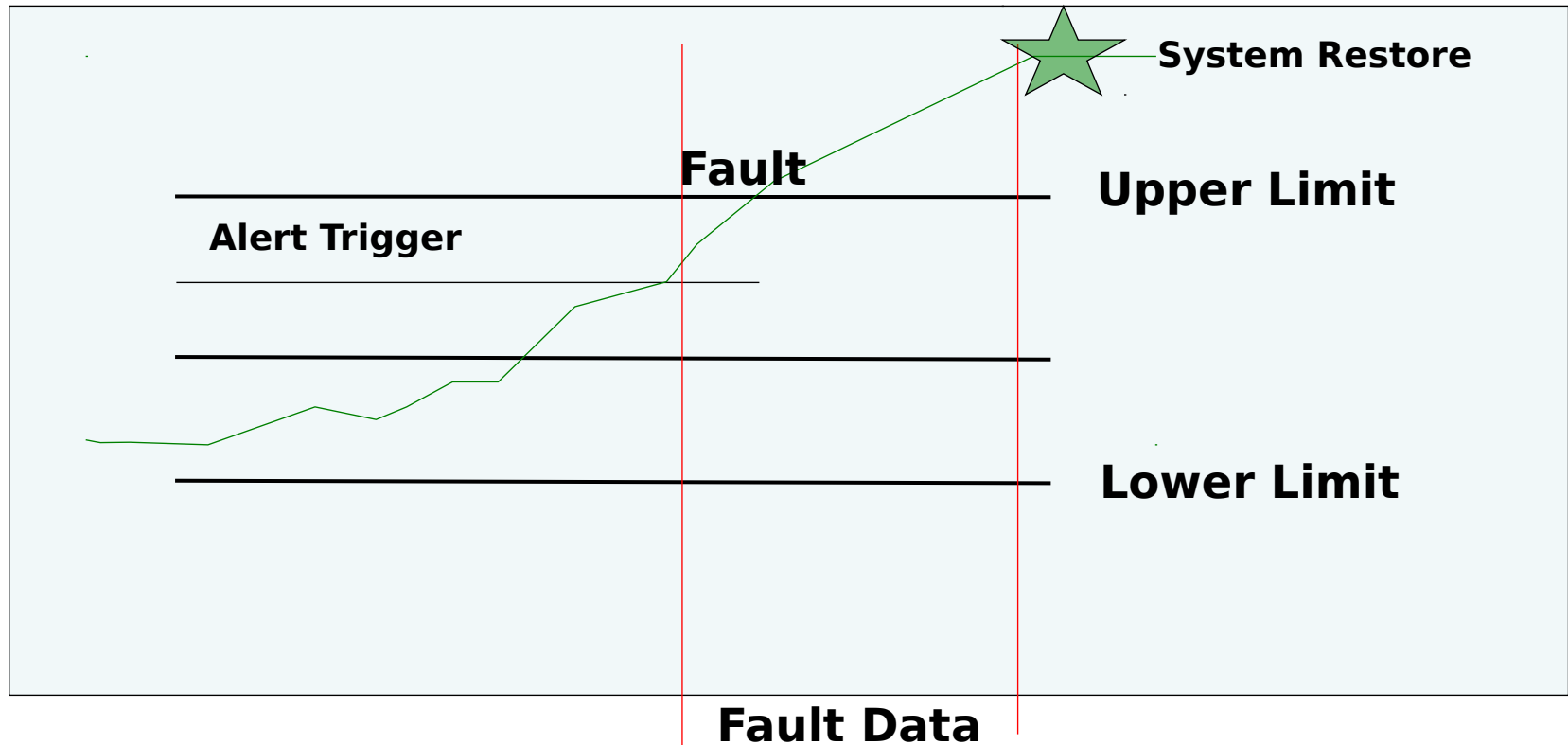
On-Board Software Client



Sensors, Cabling, Digital Data Buss



Business Rules



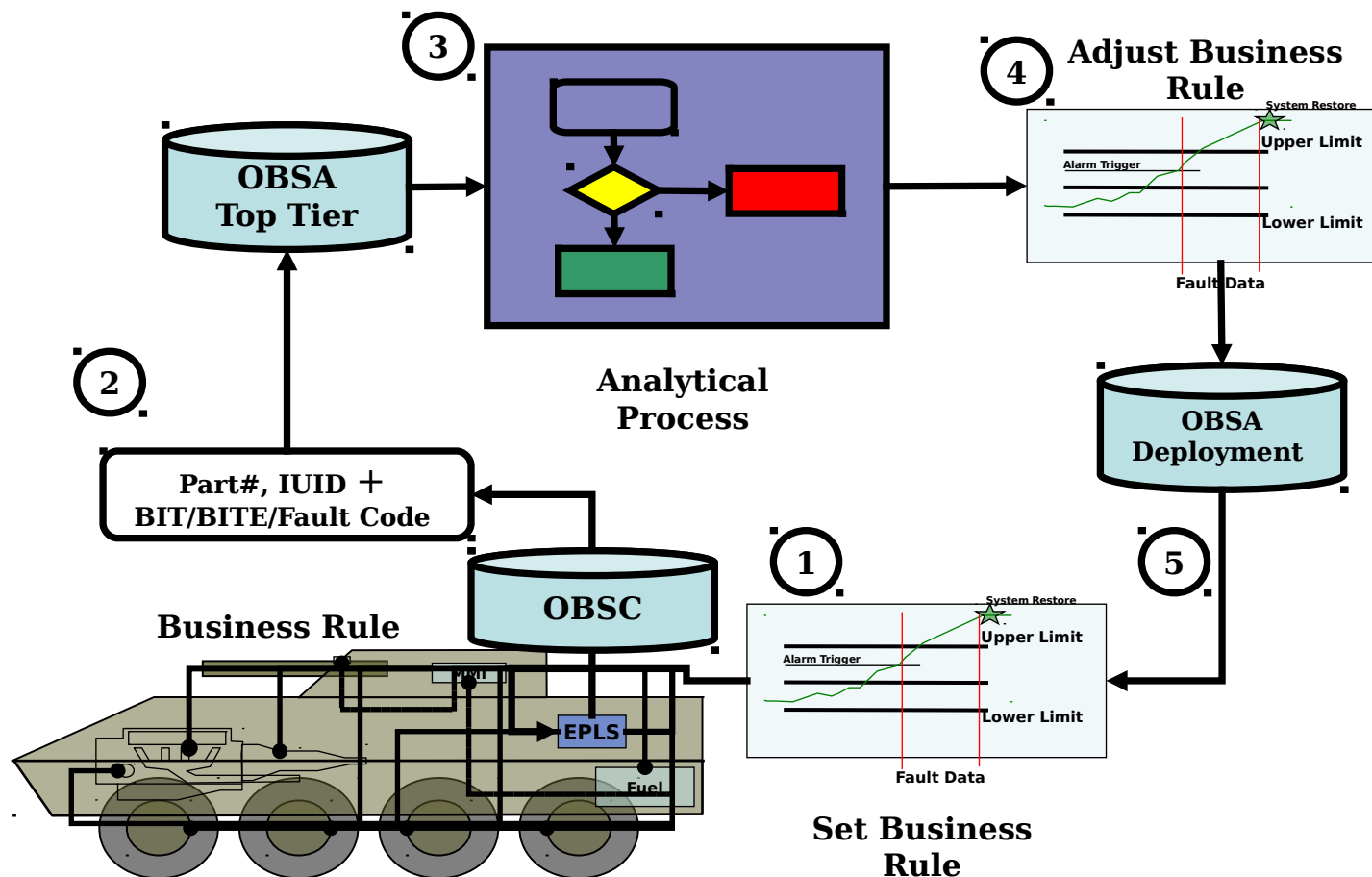


Digital Data

- Platform - IUID
 - Sub-System 1 - IUID
 - Sub-Assembly - IUID
 - Sub-System 2 - IUID
 - Sub-Assembly - IUID
 - Sub-System 3 - IUID
 - Sub-Assembly - IUID
 - Sub-System 4 - IUID
 - Sub-Assembly - IUID
 - Sub-System 5 - IUID
 - Sub-Assembly - IUID



Condition





MARINE CORPS SYSTEMS COMMAND
UNITED STATES MARINE CORPS

30 Jul 09



QUESTIONS?